

**Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure**  
Serial No.: 09/888,943  
Confirmation No.: 9282  
Filed: 25 June 2001  
For: RESPIRATORY VALVE

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### **Allowable Claims**

Applicants thank the Examiner for notification to the effect that claims 15-27 are allowable, and that claims 36, 37, 46, and 47 would be allowable if rewritten in independent form.

### **The 35 U.S.C. §102 Rejection**

The Examiner rejected claim 28 under 35 U.S.C. §102(b) as being anticipated by Japuntich et al. (U.S. Patent No. 5,509,436). Applicant further discusses claims 29-35 and 38-45 in connection with this rejection; thus, Applicants assume that the Examiner intended also to reject claims 29-35 and 38-45. Affirmation of this assumption is respectfully requested. Under this assumption, Applicants respectfully traverse the rejection of claims 28-35 and 38-45.

Applicants' independent claim 28 recites a respirator comprising a unidirectional valve wherein the valve includes a valve body and valve flap having "a curvature from the first end to the second end when the valve flap is not attached to the valve body," and independent claim 38 recites a respirator that includes a face mask and unidirectional valve located over an opening in the face mask, wherein the valve flap includes "a curvature from a first end to a second end when the valve flap is not attached to the face mask." That is, in each of claims 28 and 38, the recited valve flap itself has a curvature that is not the result of an outside force, such as may be provided when the valve flap is attached to the valve body (claim 28) or to the face mask (claim 38).

The valve flaps of Japuntich et al., conversely, "preferably assume[s] a flat configuration where no forces are applied" (Japuntich et al., col. 7, lines 30-31, emphasis added). On the other hand, as shown in Figures 3, 5, and 6 of Japuntich et al., the flexible flap 24 of Japuntich et al. may have a concave curvature when "in a closed position resting on [the concave curvature of] seal ridge 30" (Japuntich et al., col. 6, lines 12-15), the flap may include a "deformation curve . . . when it is secured as a cantilever beam" (Japuntich et al., col. 6, lines 15-17), and the flap may also display a curvature when a force (e.g., fluid 36) is exerted on the flap to force it in an open position (Japuntich et al., Figure 3 col. 6, lines 20-27). Furthermore, flexible flap 24 may be deformed by applying a uniform force 47 to the flap when it is secured at a first portion 28 to a

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hold-down surface 46 (Japuntich et al., Figure 5 and col. 8, lines 30-33), and also may be deformed by gravity rather than by application of a uniform force 47 (Japuntich et al., Figure 6 and col. 9, lines 25-34). That is, the flaps of Japuntich et al. assume a flat configuration when no forces are applied (e.g., when the flap is not secured as a cantilever beam, when the flap is not resting on the concave curvature of seal ridge 30, when the flap is not forced into an open position by the force of fluid 36, and when the flap is not secured to a hold-down surface 46 and subjected to an applied uniform force 47 or gravity).

Applicants point out that the figures of Japuntich et al. display a curvature of the flap 24 when they are attached to a surface (e.g., seal ridge 30, hold-down surface 46) and when a force is applied thereto (e.g., fluid 36, uniform force 47, and gravity (g)). The flaps of Japuntich et al. preferably assume a flat configuration (e.g., do not comprise a curvature from a first end to a second end) when no forces are applied, and Applicants submit that there is no suggestion that the flaps of Japuntich et al. would continue to display a curvature in the absence of forces such as the seal ridge 30, hold-down surface 46, flow of fluid 36, force 47, and gravity. In contrast, the valve flaps of Applicants' claims 28 and 38 do themselves comprise a curvature in the absence of attachment to a valve body (claim 28) or face mask (claim 38).

The Examiner asserted in the present Office Action that, with respect to Applicants' claim 28, Japuntich et al. disclose, *inter alia*, a unidirectional fluid valve including a valve body and a valve flap, "wherein the valve flap has a curvature from the first end to the second end when the valve flap is not attached to the valve body" (Office Action, page 2, paragraph 2). The Examiner also asserted, with respect to Applicants' claim 38, that Japuntich et al. disclose, *inter alia*, a face mask including an opening and a unidirectional valve, including a valve flap, over the opening, "the valve flap 24 comprising a curvature from a first end to a second end when the valve flap is not attached to the face mask" (Office Action, page 3, paragraph 5). The Examiner, however, provides no support in either the specification and/or figures of Japuntich et al. in support of the assertion that the flaps of Japuntich et al. include a curvature when not attached to a

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surface, such as a valve body or a face mask. Applicants respectfully request that the Examiner provide support in Japuntich et al. for the above assertions.

For at least the above reasons, Applicants respectfully submit that independent claims 28 and 38 are novel in view of Japuntich et al. Furthermore, for at least the reason that claims 29-37 are dependent upon claim 28 and that claims 39-47 are dependent upon claim 38, Applicants assert that claims 29-37 and claims 39-47 are also novel in view of Japuntich et al.

Reconsideration and withdrawal of the rejection of claims 28-35 and 38-45 are, therefore, respectfully requested.

**Summary**

It is respectfully submitted that the pending claims 15-47 are in condition for allowance and notification to that effect is respectfully requested.

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The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted for  
**MITTLESTADT et al.**

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5 MAY 2005

Date

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**CERTIFICATE UNDER 37 CFR §1.8:**

The undersigned hereby certifies that the Transmittal Letter and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 5<sup>th</sup> day of May, 2005, at 10:16 a.m. (Central Time).

By: Rachel Gagliardi-Gebhardt  
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